

Course Description:

This course enables students to broaden their understanding of real-world applications of mathematics. Students will analyse data using statistical methods; solve problems involving applications of geometry and trigonometry; solve financial problems connected with annuities, budgets, and renting or owning accommodation; simplify expressions; and solve equations. Students will reason mathematically and communicate their thinking as they solve multi-step problems. This course prepares students for college programs in areas such as business, health sciences, and human services, and for certain skilled trades.

Level: College	Credit Value: 1.0	Program Enhancement Fee: None
Pre-requisite: MBF3C/MCF3M/MCR3U	Department: Mathematics	

Textbooks & Resources:

- Growing Success: Assessment, Evaluation and Reporting in Ontario Schools, 2010
- The Ontario Curriculum, Grades 11 & 12: Mathematics, 2007 revised
- Foundations for College Mathematics 12. McGraw-Hill Ryerson (Replacement Cost:\$75.00)
- Printed Packages provided by the teacher

Course Evaluation: Student Evaluation consists of three components...

1) Learning Skills & Work Habits:

Students are evaluated on 6 Learning Skills & Work Habits.

They are:

- | | |
|--------------------|-------------------|
| • Responsibility | • Collaboration |
| • Organization | • Initiative |
| • Independent Work | • Self-Regulation |

These six attributes are evaluated on a scale of Excellent (E), Good (G), Satisfactory (S) & Needs Improvement (N) and reported on the report card. They **are not** included in the course mark, unless specified in the curriculum expectations.

2) Term Mark (Assessment of Learning):

Student performance standards for knowledge and skills are described in the curriculum Achievement Chart. The curriculum is assessed in four categories:

- | | |
|-------------------------------|-----|
| • Knowledge and Understanding | 25% |
| • Thinking and Inquiry | 10% |
| • Communication | 10% |
| • Application | 25% |

Evaluation of these four categories generates the term mark. **This term mark accounts for 70% of the final mark.**

It is the student's responsibility to submit evidence of learning.

3) Final Evaluation (Assessment of Learning):

The final evaluation, administered at or towards the end of the course is based on the evidence shown to the right. The final evaluation accounts for 30% of the final mark.

The final evaluation consists of (out of 30%):

Culminating Project	5%
Final Exam	25%

Final Mark = 70% Term Mark + 30% Final Evaluation

Please retain this page in the front of your notebook for future reference.

Course Outline:		Approximate Length	Major Unit Evaluation
Unit	Description		
1) EXPONENTIAL FUNCTIONS	Students will describe trends based on the interpretation of graphs, compare graphs using initial conditions and rates of change, and solve problems by modelling relationships graphically and algebraically. Students will make connections between formulas and linear, quadratic, and exponential relations, solve problems using formulas arising from real-world applications, and describe applications of mathematical modelling in various occupations.	10days	Unit Test
2)PERSONAL FINANCE	Students will demonstrate an understanding of annuities, including mortgages, and solve related problems using technology; Students will gather, interpret, and compare information about owning or renting accommodation, and solve problems involving the associated costs; Students will design, justify, and adjust budgets for individuals and families described in case studies, and describe applications of the mathematics of personal finance.	20 days	Unit Test
3) GEOMETRY	Students will solve problems involving measurement and geometry and arising from real-world applications; Students will explain the significance of optimal dimensions in real-world applications, and determine optimal dimensions of two-dimensional shapes and three-dimensional figures;	10 days	Unit Test
4) TRIGONOMETRY	Students will solve problems using primary trigonometric ratios of acute and obtuse angles, the sine law, and the cosine law, including problems arising from real-world applications, and describe applications of trigonometry in various occupations.	10 days	Unit Test
5) ONE/TWO VARIABLE DATA	Students will collect, analyse, and summarize two-variable data using a variety of tools and strategies, and interpret and draw conclusions from the data; Students will gather, interpret, and describe information about applications of data management in occupations, and about college programs that explore these applications	15 days	Test

Note: The order of the units of study may change due to student needs and resources available during the course.

General Information

Refer to the agenda for Wexford CSA Academic Conduct & Evaluation policies.

How to seek extra help:

- 1) Speak to your subject teacher and book a time to meet (Students & Parents).
- 2) Speak to a Peer Helpers/Tutors
- 3) Use reliable sources on the Internet.
- 4) Math Coach: <http://tdsb.na3.acrobat.com/mathcoach>
- 5) Speak to your Guidance Councillor (Students & Parents) who can guide you to other sources.

Recommended Internet Resources:

www.khanacademy.org
www.resources.elearningontario.ca
www.explorelearning.com
www.math.com
www.ca.ixl.com

Homework is assigned on a regular basis. Homework completion and regular attendance are key to being successful in this course.